Hepatitis C
Assuring Treatment

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PUBLIC HEALTH

Hepatitis C

- “Hepatitis” inflammation of the liver.
  - Hepatitis A, Hepatitis B, and Hepatitis C are most common types of viral hepatitis
- Hepatitis A: caused by Hepatitis A Virus
  - Contaminated food
  - Person to person
    - Fecal/oral route of transmission
- Hepatitis B: caused by Hepatitis B Virus
  - Person to person
    - Blood, semen, or other bodily fluids
- Hepatitis C: caused by Hepatitis C Virus
  - Bloodborne

Epidemiology of Hepatitis C

- Mode of transmission
  - Bloodborne
- Incubation period
  - 2 weeks – 6 months (average 6-9 weeks)
- Genotypes
  - Type 1: ~75% of cases
  - Types 2 or 3: 20 – 25% of cases
  - Types 4, 5, or 6: <1% of cases

Epidemiology of Hepatitis C

- Symptoms
  - Acute infection: 70-80% show no symptoms
    - Fever, fatigue, dark urine, clay-colored stool, abdominal pain, loss of appetite, nausea, vomiting, joint pain, and/or jaundice
  - Chronic infection: 75-85% develop chronic infection
    - 60-70% develop liver disease
    - 5-20% develop cirrhosis
    - 1-5% develop liver cancer

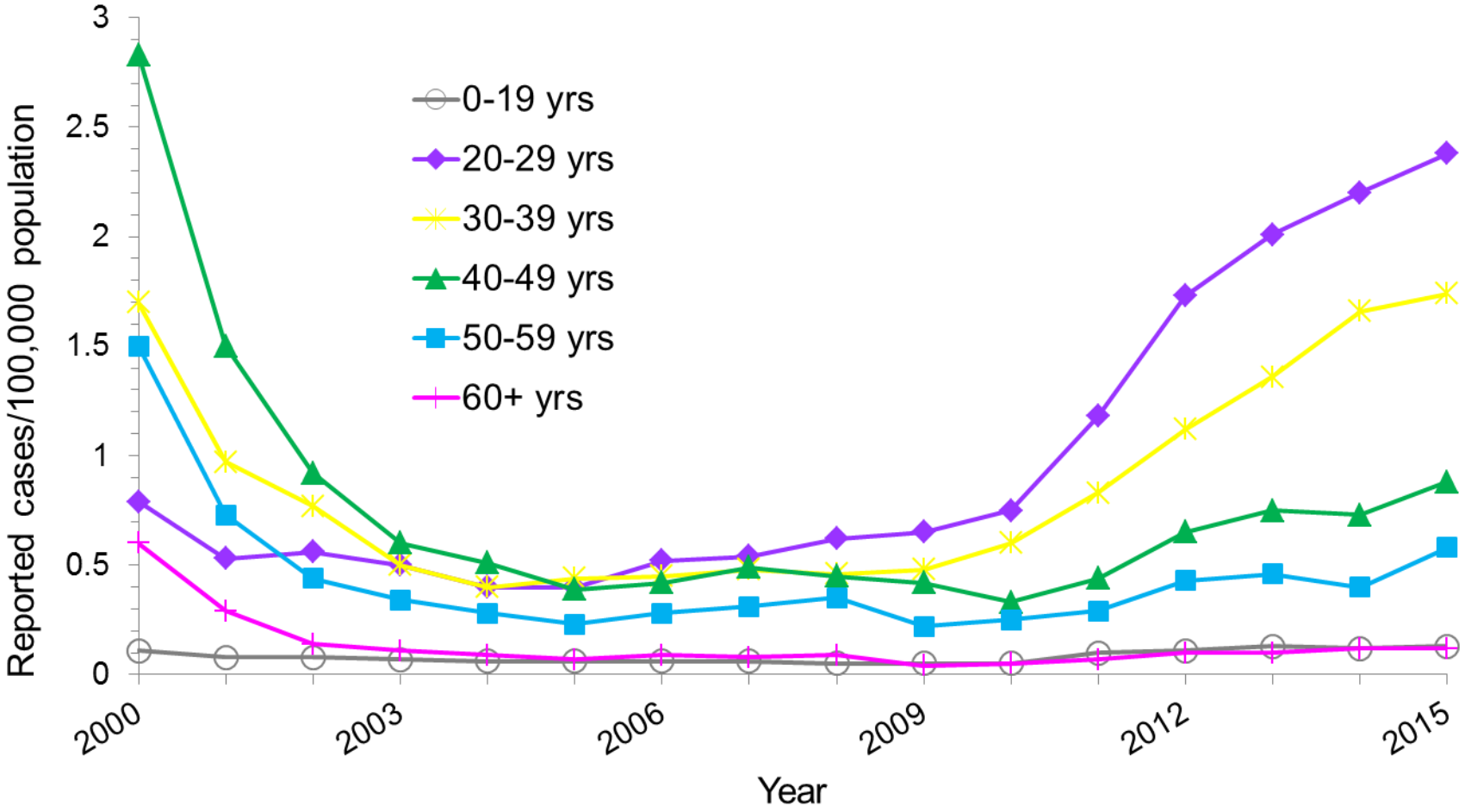
Hepatitis C: Treatment

- Newer Treatments
  - 12 week treatment
    - 96-97% no virus detected in blood 12 weeks after completing treatment
  - All strains
  - Without cirrhosis or with mild cirrhosis
  - Most common adverse reactions
    - Headache, fatigue, diarrhea, and nausea

Hepatitis C: National Data (2015)

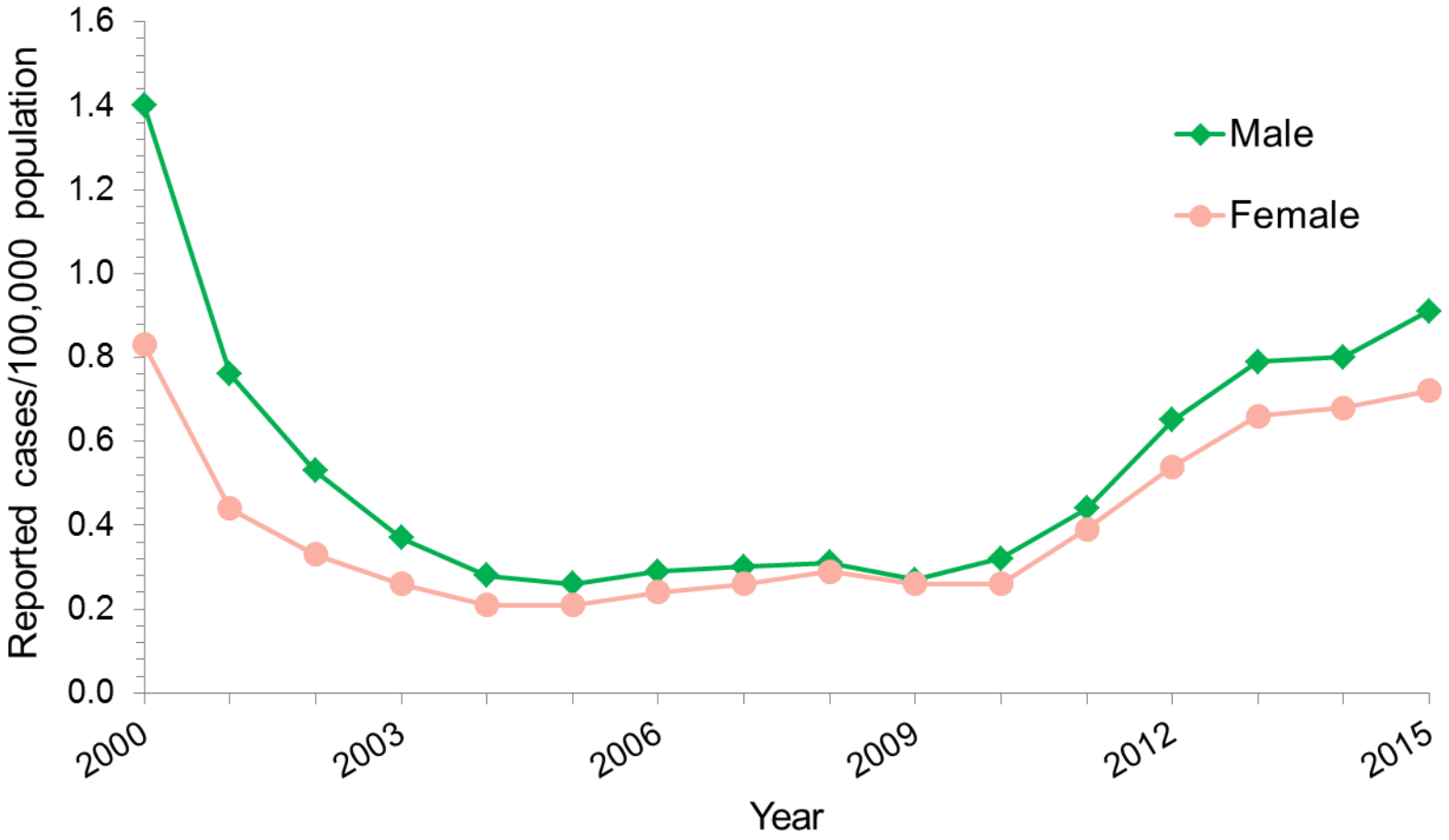
- Estimated 3.5 million persons living with HCV infection
- From 2011 to 2015:
  - # acute HCV cases increased by over 97%
- In 2015:
  - Estimated 33,900 new HCV infections

Figure 4.2. Incidence of Acute Hepatitis C, by Age Group United States, 2000–2015



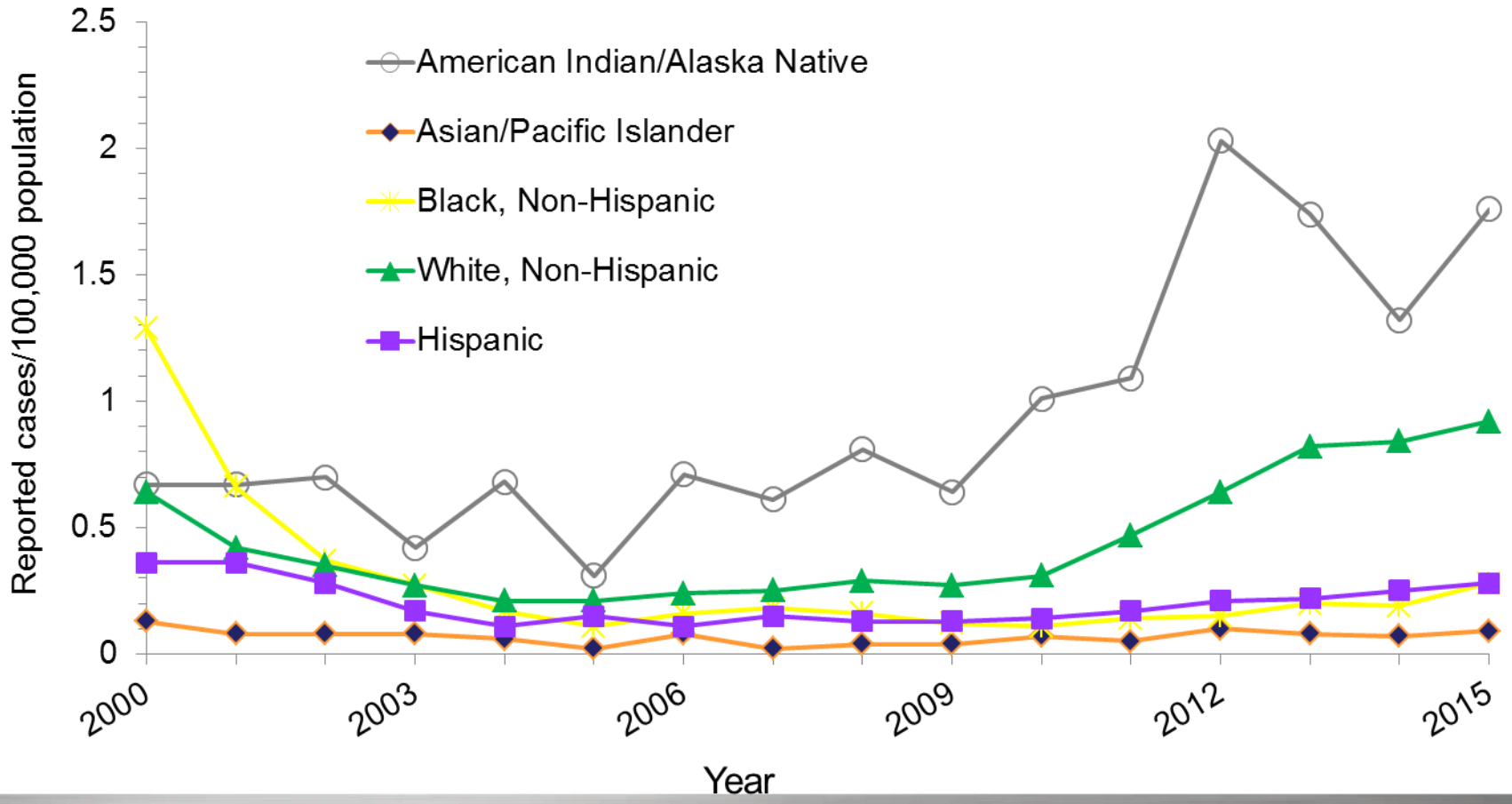
Source: CDC, National Notifiable Diseases Surveillance System (NNDSS)

Figure 4.3. Incidence of Acute Hepatitis C, by Sex United States, 2000–2015



Source: CDC, National Notifiable Diseases Surveillance System (NNDSS)

Figure 4.4. Incidence of acute hepatitis C, by race/ethnicity — United States, 2000–2015



Source: CDC, National Notifiable Diseases Surveillance System (NNDSS)

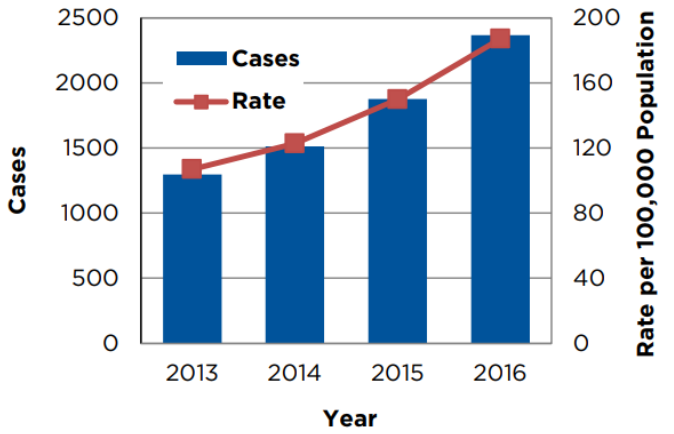
Hepatitis C: National Data (2000-2015)

- Risk Factors
  - Current injection drug users
  - Past injection drug users
  - Recipients of donated blood, blood products, and organs
  - Receiving blood product for clotting problems before 1987
  - Hemodialysis patients
  - Body piercing or tattoos done by non-sterile instruments
  - HIV infected persons
  - Children born to mothers infected the HCV

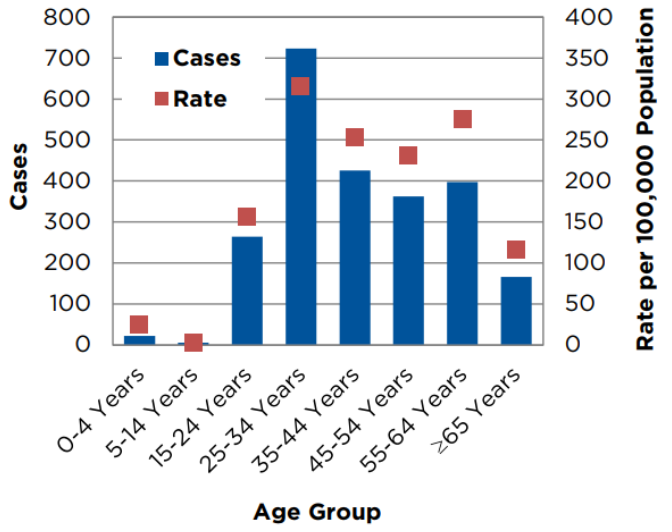
Hep C Franklin County (2016)

- Rate of chronic HCV increased by 75% from 2013 to 2016

CHRONIC HEPATITIS C CASES AND RATES, FRANKLIN COUNTY, 2013-2016

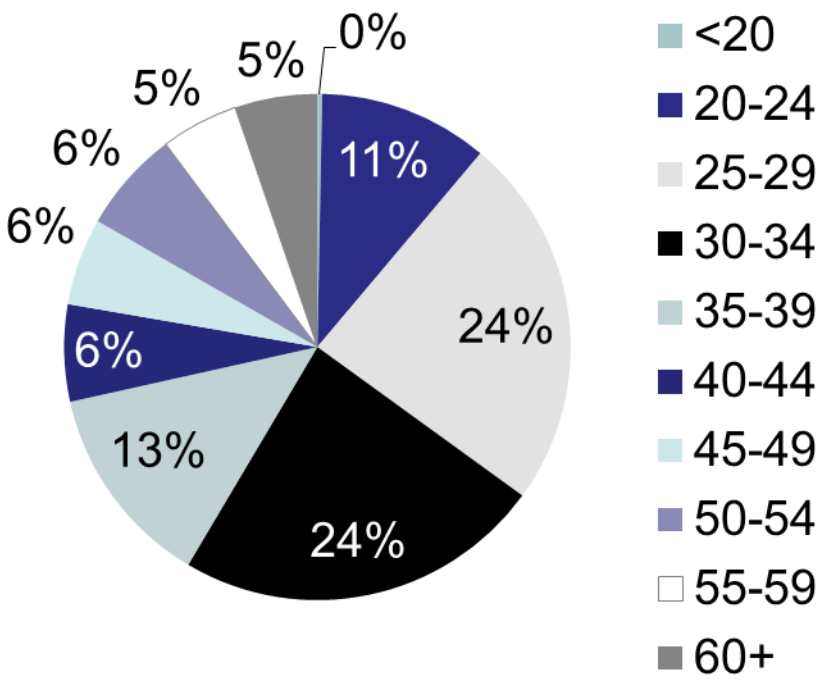


AGE DISTRIBUTION OF CHRONIC HEPATITIS C CASES, FRANKLIN COUNTY, 2016

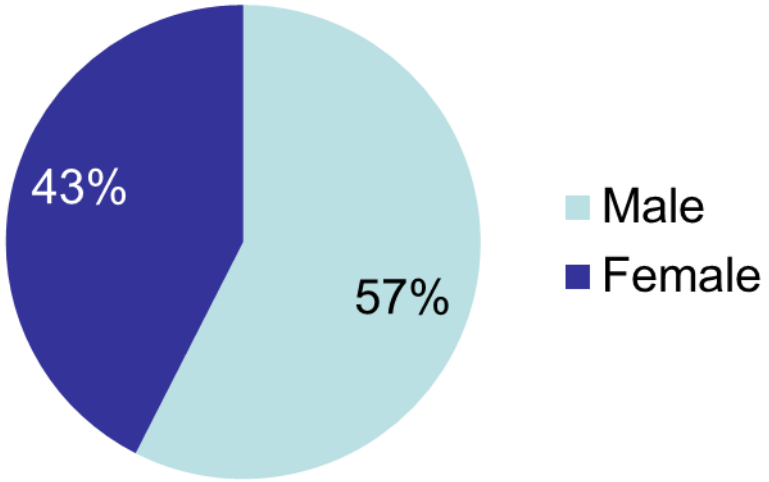


Hepatitis C: CPH (2017)

Age



Sex



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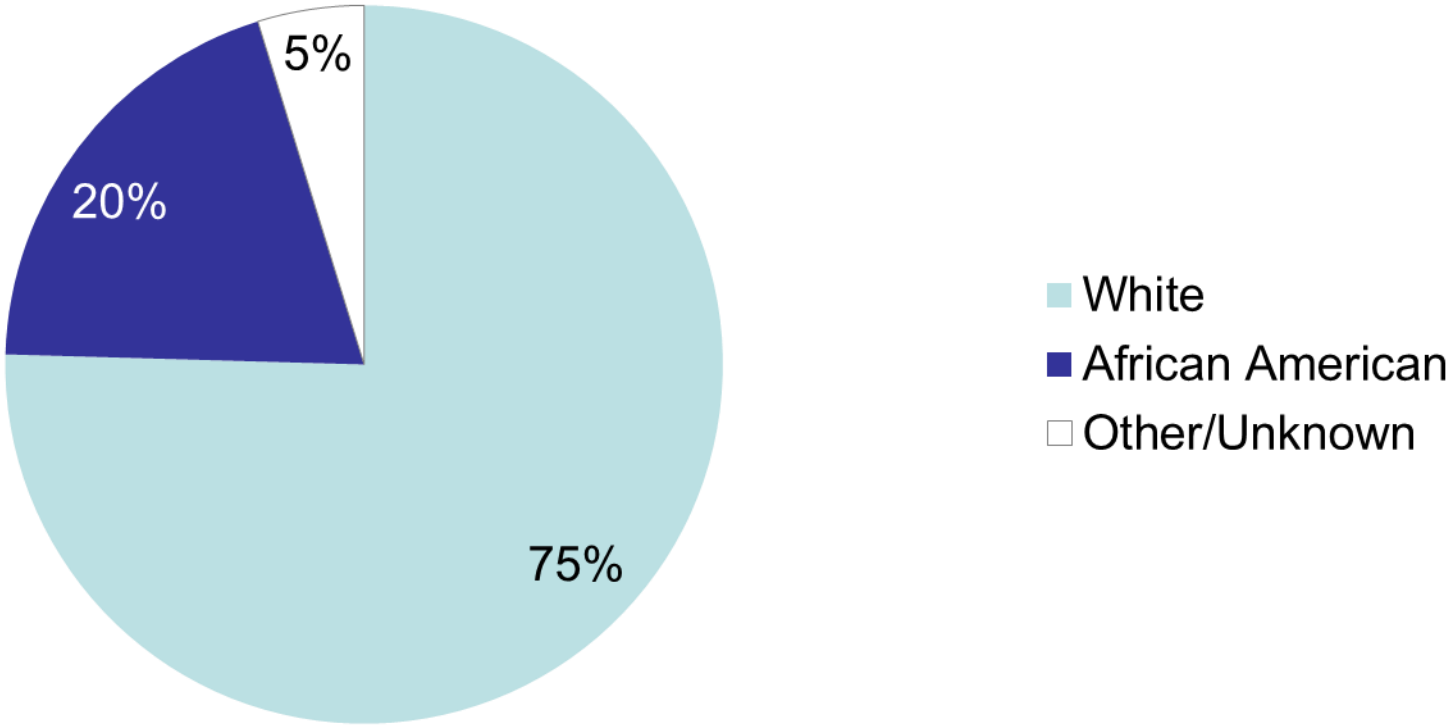
Hepatitis C: CPH (2017)



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Hepatitis C: CPH (2017)

- 77.5% Injection Drug Users
- 77.0% Drug Snorting
- 60.2% Non-professional tattoo
- 45.8% Previous STI
- 15.3% Currently incarcerated

Hepatitis C: Testing Process

- Preliminary testing (2017)
  - 4,290 tested
    - 309 positive
- Confirmation testing
  - 243 total RNA tests
    - 184 confirmed

Hepatitis C: Preliminary Testing within CPH (2017)

Positivity

- Alcohol and Drug Program
  - 35.71% rate
- Sexual Health Clinic
  - 7.02% rate before universal (average)
  - 2.48% rate after universal (average)

Spontaneous Clearing

- Occurs in approximately 25% of individuals
  - Higher rate among women
  - Lower rate among illicit drug use (any kind)
  - Lower rate among HIV coinfected individuals

Confirmation Testing

- 75.7% positivity
  - 85.0% reported injection drug use
  - 67.5% reported receiving a non-professional tattoo
  - 55.0% reported having 20 or more sexual partners
  - 25.6% reported receiving addiction and/or mental health treatment

HepC Linkage to Care

- Follow up on all CPH Sexual Health Clinic and AOD testing sites rapid HepC positive tests
- Linkage program ensures that the patient has access to confirmatory testing
- Education on HepC and medical referral if the patient has a detectible viral load
- Clients can get support for transportation, insurance and other needs

Call #645-CARE (2273) or

Sally #645-6561 Mario #724-4675

Hep C: Linkage to Care ARTAS-Intervention

- **Anti-Retroviral Treatment and Access to Services(ARTAS)Goals:** Help the client overcome barriers to being linked to medical care.
- Build a trusting, effective relationship between client and the Linkage Coordinator.
- Facilitate the client's ability to create an action plan for being linked to medical care.

New FOCUS HCV Linkage to Care Variable

Response Options	Linkage to Care
1. Attended first appointment with HCV Specialist	✓
2. Attended first appointment with PCP	✓
3. For those patients not linked to an HCV specialist/PCP, patient has attended first appointment post-RNA-diagnosis for other clinical services for HCV, as determined by provider or clinical protocol: a. HCV education (group or individual), offered in a clinical setting b. Individual consultation, including psychosocial assessment or further clinical evaluation c. Substance use treatment or mental health services	✓ *(new)*

- **Key change: Linkage definition now includes other clinical appointments beyond PCP or Specialist that are part of clinical protocol**

Hep C: Linkage to Care Success 2017

- 93.8% of patients who had a detectible viral load received post-test education

- 51.4% of patients referred to the program attended their doctor's appointment

Hep C: Linkage to Care Challenges

- Active drug users
- Unable to draw viral load
- Client refuses treatment

HepC and other drug usage

- Prevalence rates of HepC in nasal drug users ranges from 2.3% to 35.3%
- HepC has been found on the tip of crack pipes, sharing cookers, cotton, or alcohol swaps
- HepC transmission can occur from sharing of straws and/or crack or crystal meth pipes

Questions

- **32 year old male stated that he received tattoos while incarcerated a few years back.**

  Do we screen for HepC?

- **Female born in 1965, married, never tested positive for an STI's and declined drug usage in the past.**

  Do we screen for HepC?

Question

- Female, 25 years old, comes to your clinic stating that she tested positive for HepC about a year ago. You see in her record that she had a detectible viral load last year and never received medical care for her HepC.

  Do you drawn another HepC viral load?

References

Hepatitis C Information

- Centers for Disease Control and Prevention (2015). Hepatitis C information. Extracted March 15, 2018 from https://www.cdc.gov/hepatitis/hcv/index.htm

Treatment Information

- Kish, T., Aziz, A., & Sorio, M. (2017). Hepatitis C in a new era: A review of current therapies. *Pharmacy and Therapeutics*, 42(5), pp 316-329

National Statistics

- Centers for Disease Control and Prevention (2017). Surveillance for Viral Hepatitis. Extracted March 15, 2018 from https://www.cdc.gov/hepatitis/statistics/2015surveillance/index.htm
- https://effectiveinterventions.cdc.gov/en/HighImpactPrevention/PublicHealthStrategies/ARTAS.aspx
- https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section1

References

Franklin County Statistics

- Berger, B. & Brewer, S (2017). Annual summary of reportable diseases 2016 Columbus & Franklin County. Extracted March 15, 2018 from /www.columbus.gov/publichealth/programs/Office-of-Epidemiology/Infectious-Disease-Reports/

Columbus Public Health Statistics

- Columbus Public Health NextGen (2017). Data extracted by Clinical Operations. Data analyzed by Sexual Health Prevention.
- Columbus Public Health CAREWare (2017). Data extracted and analyzed by Sexual Health Prevention.